

#### AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. deletion) or double brackets (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

1. **(Currently amended)** A dental component implant for extending sized and configured to fit at least partially in a hole formed in jaw bone and through soft tissue belonging to the jaw bone, the dental component implant comprising an upper portion and a threaded lower portion, one or more titanium dioxide layers applied on at least one outer surface of the threaded lower portion of the dental component implant, wherein between about 70-100% of each layer comprises crystalline titanium dioxide in the anatase phase.

2. **(Canceled)**

3. **(Currently amended)** The dental component implant as in claim 1, wherein each layer has a thickness of between about 0.05 - 10  $\mu\text{m}$ .

4. **(Currently amended)** The dental component implant as in claim 1, wherein a majority of the outer surfaces of the dental component implant are provided with crystalline titanium dioxide in the anatase phase.

5. **(Currently amended)** The dental component implant as in claim 1, wherein a plurality of the outer surfaces of the dental component implant are provided with crystalline titanium dioxide in the anatase phase.

6. **(Currently amended)** The dental component implant as in claim 1, wherein the dental component implant comprises a portion which can be placed against the soft tissue.

7. **(Currently amended)** The dental component implant as in claim 1, wherein each titanium dioxide layer in the crystalline anatase phase comprises a bone stimulation substance.

8. **(Canceled)**

9. **(Currently amended)** The dental component implant as in claim 1, wherein a portion of the dental component implant configured to be placed against the soft tissue comprises a threadless outer surface.

10. (Currently amended) The dental component implant as in claim 1, wherein a portion of the dental component implant is coated with a layer of crystalline titanium dioxide in the anatase phase, and a remaining portion of the dental component comprises a part directed away from the dental component implant and is coated with a layer of crystalline titanium dioxide in the amorphous, rutile, or anatase phase.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Currently amended) The dental component implant of claim 1, wherein each layer comprises crystalline titanium dioxide which completely assumes the anatase phase.

15. (Currently amended) The dental component implant as in claim 10, wherein the portion of the dental component is coated with layers of crystalline titanium dioxide in the anatase phase along 2/3 of its length.

16. (Currently amended) The dental component implant as in claim 1, further comprising a bone stimulation substance disposed on the dental component implant.

17. (Canceled)

18. (Currently amended) The dental component implant as in claim 16, wherein the bone stimulation substance comprises BMP.

19. (Currently amended) A dental implant for sized and configured to extend extending at least partially in a hole formed in jaw bone and through soft tissue belonging to the jaw bone, the dental implant comprising at least one thread extending along a body of the implant, the dental implant further comprising one or more titanium dioxide layers applied on at least one outer surface of the dental implant, wherein between about 70-100% of each layer comprises crystalline titanium dioxide in the anatase phase.

20. (New) The dental component as in claim 1, wherein each layer has a thickness of between about 0.05 - 10  $\mu\text{m}$ .